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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/933,928

Applicant(s)

PELIOTIS ET AL.

Examiner

FARZANA E. HOSSAIN

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-8, 10-13, 17, 19-23, 25, 26, 29-36, 38, 72 and 73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 10-13, 17, 19-23, 25, 26, 29-36, 38, 72 and 73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/20/2008 has been entered.

Response to Amendment

2. This action is in response to communications filed 12/20/2008. Claims 1, 17 and 19 are amended. Claims 2, 9, 14-16, 18, 24, 27, 28, 37, 39-71 are cancelled. Claims 3-8, 10-13, 20-23, 25, 26, 29-36 and 38 have been previously presented. Claims 72 and 73 are new.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 15, 17 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Claims 1, 17 and 19, the applicant argues that Abecassis discloses a real time system and that a real time system cannot be very complicated without causing the video to stutter or pause (Page 11).

In response to the applicant, Abecassis's invention meets limitations of the claims and the argument of a stuttering or pausing system will not be answered as it does not relate to the limitations. See new rejection for the new limitation.

4. All other dependent claims depend on the independent claims and no argument was made to any specific dependent claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 5-8, 10-13, 17, 19-23, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis (US 6,011,895) in view of Kwoh et al (US 6,226,793 and hereafter referred to as "Kwoh") and Sezan et al (US 2005/0091685 and hereafter referred to as "Sezan").

Regarding Claims 1, 17 and 19, Abecassis discloses a method of selecting preferred video segments from a plurality of video segments within a video stream, a system of selecting preferred video segments from a continuous series of video segments within a video stream (Column 7, lines 16-26, Figure 1, Figure 3, Figure 5), the method and system comprising: a set top box (STB) that receives the video stream, the video stream comprising a continuous series of video segments or sequential series of segments of a program to play to the viewer (Figure 3, Column 8, lines 62-64); the STB separates markers encoded within the video stream, the markers indicating divisions or beginning and ending frames between the plurality of video segments of the video stream (Column 8, lines 39-45); the STB separates tags encoded within the video stream, each video segment having associated tags, the tags provide information relating to the content of an associated video segment (Figures 1A-1C, Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-52, Column 6, lines 44-55, Column 5, lines 17-20); a video segment database or a database storing the markers and tags separated from the video stream (Figure 5, 623, 622, 633, Column 5, lines 17-20); a video storage storing the plurality of video segments, the plurality of video segments identified from the video stream using the markers (Figure 5, 611, 612, Column 11, lines 15-30, 59-65); a user preference database, the user preference database storing viewer preferences from a viewer (Figure 5, 651, Column 10, lines 57-65, Figure 1, Column 7, lines 8-15); a comparator compares the tags from the database with viewer preferences to select preferred video segments from the video storage and using video preference information of a viewer to select preferred video segments from the video storage by

comparing the tags describing the content of each video segment stored in the database with the video preference information of the viewer (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52, Column 14, lines 10-13, Column 15, lines 52-57, Figures 1A-C, Figure) and downloading preferred video segments from the video content from the local storage for viewing by the viewer if the comparison of the tags of each video segment with the video preference information is favorable (Column 11, lines 1-15); an indication of the preferred video segments (Column 11, lines 15-23, Figure 5, 622). Abecassis does not explicitly disclose a decoder decoding the tags and markers or marking the video segment database with an indication of the preferred video segments.

In analogous art, Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668, Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each video segment (Column 13, lines 33-64, Figure 21); receiving a video stream, the video stream comprising a continuous series of video segments (Figures 23 and 24); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference information of the viewer (Figure 26). Kwoh discloses that step of encoding tags and

markers within the video stream comprise encoding tags and markers manually by a use of computer (Figure 20, 10007). Kwoh discloses a video blanking interval decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis to include decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Furthermore, in *KSR International Co. v. Teleflex Inc.*, the Court found that the claim would have been obvious because the substitution of one known element for another would have yield predictable results to one of ordinary sill in the art at the time of the invention.

In analogous art, Sezan discloses searching, browsing and filtering programs including segments of programs using user preferences and tags and markers or descriptive content of programs and segments and divisions of the programs (Page 3, paragraph 0041, 0042, Page 5, paragraph 0053, Page 7, paragraph 0067, Page 8, paragraph 0070, Page 16, paragraph 0185), storing markers and tags in a database (Page 3, paragraph 0041, 0042, Page 5, paragraph 0053, Figure 13) and marks the video segment database with an indication of the preferred video segments or portion of programs or storing an indication of the preferred video segments or portion of programs in the database (Page 3, paragraph 0041-0042, Page 4, paragraph 0049, Page 5, paragraphs 0052-0053, Page 17, paragraph 0192). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include marks the video segment database with an indication of the preferred video segments or portion of programs or storing an indication of the preferred video segments or portion of programs in the database (Page 3, paragraph 0041-0042, Page 4, paragraph 0049, Page 5, paragraphs 0052-0053, Page 17, paragraph 0192) as taught by Sezan in order to integrate several devices into one interface with which a user can become familiar (Page 1, paragraph 0005) as disclosed by Sezan.

Regarding Claim 3, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Kwoh discloses encoding tags and markers within the video stream manually by a use of computer (Figure 20, 10007).

Regarding Claim 5, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Abecassis discloses that the markers within the video stream are encoded with markers video stream based upon detection of changes of scenes (Figure 3A).

Regarding Claim 6, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Abecassis discloses using video preference information of the viewer to select preferred video segments within a video stream comprises comparing key words are input by the viewer with the tags that have been placed within the video stream (Column 7, lines 8-26, Column 8, lines 38-45).

Regarding Claim 7 and 23, Abecassis, Kwoh and Sezan disclose all the limitations of Claims 1 and 19 respectively. Abecassis discloses that encoding tags within the video stream such as the topic (Column 7, lines 8-26). Kwoh discloses placing

the information from an EPG into the video stream relating to the video segment (Column 14, lines 46-67, Column 15, lines 1-21).

Regarding Claim 8, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Kwoh discloses the tags and markers are encoded in the vertical blanking interval (Column 13, lines 50-55, Column 14, lines 66-67, Column 15, lines 1-9).

Regarding Claim 10, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Abecassis discloses that skipping to a next video segment upon receiving an input control signal from a user input device (Column 7, lines 8-26, Column 5, lines 24-36, Column 11, line 35) and proceeding to a selected video segment (Column 7, lines 8-26, Column 5, lines 24-36).

Regarding Claim 11, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Abecassis discloses that excluding the video segments that do not have tags that match any preferred content tags in the video preference information of the viewer (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52). Kwoh discloses excluding the video segments that do not have tags that match any preferred content tags in the video preference information of the viewer (Figures 23 and 24).

Regarding Claim 12, Abecassis, Kwoh and Sezan all the limitations of Claim 1. Abecassis discloses excluding the video segments that match undesired content tags in the video preference information of the viewer (Column 7, lines 20-23, Column 10, lines 10-16).

Regarding Claim 13, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 1. Abecassis discloses using video preference information of a viewer to select preferred video segments from the video storage comprising sequentially accessing preferences and tags stored in the database or accessing sequentially tags and markers based on the scenes or segments (Column 11, lines 15-30).

Regarding Claim 20, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis discloses a personal video recorder for filtering the video stream based on a viewer's habits and preferences to provide video segments to be viewed by the viewer (Figure 5, 601, 631, 612, Column 10, lines 33-67, Column 11, lines 1-30).

Regarding Claim 21, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Kwoh discloses a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708).

Regarding Claim 22, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis discloses a comparator sequentially accesses the tags and the markers in the video segment database or sequentially access scenes for tags and markers in the video segment database (Column 11, lines 15-30)

Regarding Claim 36, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. See rejection of claim 3. Kwoh discloses that the plurality of video segments in the video stream comprise a live broadcast signal that is sent to the STB at a viewer's premises (Column 13, lines 33-64).

Regarding Claim 38, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis discloses a viewer personalized remote control or input device

(Figure 5, 655, 656, 657) that transmits the video preference information to the system (Figure 5, 651).

Regarding Claims 72 and 73, Abecassis, Kwoh and Sezan disclose all the limitations of Claims 1 and 17 respectively. Abecassis disclose storing an indication of mandatory video segments in the database or storing tags or special codes that inhibit the playing of the commercials (Column 16, lines 43-60).

7. Claims 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Sezan as applied to claim 1 above, and further in view of Maybury et al (US 6,961,954 and hereafter referred to as "Maybury").

Regarding Claims 4 and 33, Abecassis, Kwoh and Sezan disclose all the limitations of Claims 1 and 19 respectively. Abecassis, Kwoh and Sezan are silent on encoding tags and markers comprise encoding tags and markers automatically by use of voice recognition techniques. Maybury discloses encoding markers within a video stream (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) which indicates a division between a plurality of segments (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags comprising keywords (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67). Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination to include encoding markers (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67) as taught

by Maybury in order to provide a more efficient tool of allowing a user to catalog and search multimedia information which is more accurate (Column 1, lines 54-67) as disclosed by Maybury.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Sezan as applied to claim 19 above, and further in view of Eyer (US 6,483,547).

Regarding Claim 25, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis, Kwoh and Sezan are silent on the tags and markers being analog. Eyer discloses that the tags and markers are encoded as analog data in the video stream to generate the encoded video stream (Figure 1, 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers as analog data to generate the encoded video stream (Figure 1, 16) as taught by Eyer in order to use identification data to access information about the program (Column 2, lines 29-41) as disclosed by Eyer.

9. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Sezan as applied to claim 19 above, and further in view of Beckman et al (US 6,675,388 and hereafter referred to as "Beckman").

Regarding Claim 26, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis, Kwoh and Sezan are silent on the tags and markers being digital. Beckman discloses that the tags and markers are encoded as digital data or that digital

data is inserted into the VBI in the video stream to generate the encoded video stream (Column 4, lines 33-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers as digital data to generate the encoded video stream (Column 4, lines 33-35) as taught by Beckman in order to coordinate distribution of digital and analog broadcasts to receivers (Column 2, lines 1-11) as disclosed by Beckman.

10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Sezan as applied to claim 19 above, and further in view of Elenbaas et al (US 2005/0028194 and hereafter referred to as "Elenbaas").

Regarding Claim 29, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis, Kwoh and Sezan are silent on encoding tags and markers detecting changes in flesh tone. Elenbaas discloses detecting changes in flesh tone for image analyze of important scenes or story segments (Page 4, paragraph 0028). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers by detecting changes in flesh tone (Page 4, paragraph 0028) as taught by Elenbaas in order to improve search and retrieve techniques for interest in television program (Page 1, paragraph 0008) as disclosed by Elenbaas.

11. Claims 30, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Sezan as applied to claim 19 above, and further in view of Ahmad et al (US 6,880,171 and hereafter referred to as "Ahmad").

Regarding Claims 30 and 34, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Kwoh discloses insertion of markers for diversion between video segments (Figures 23 and 24). Abecassis, Kwoh and Sezan are silent on encoding tags and markers detecting changes in audio including music within the video stream. Ahmad discloses detecting changes in audio levels including music (Column 25, lines 17-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode markers by detecting changes in audio levels including music (Column 5, lines 17-25) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

Regarding Claim 32, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Kwoh discloses insertion of markers for diversion between video segments (Figures 23 and 24). Abecassis, Kwoh and Sezan are silent on markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream. Ahmad discloses that markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-

53) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

12. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Sezan as applied to claim 19 above, and further in view of Gove (5,099,322).

Regarding Claim 31, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis, Kwoh and Sezan are silent on the video stream being encoded based on detection of changes in light levels. Gove discloses that each video segment is defined by automatic detection of changes in light level within the video stream (Column 3, lines 1-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments and insert tags to indicate content by automatic detection of changes in light levels within the video stream (Column 3, lines 1-16) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

Regarding Claim 35, Abecassis, Kwoh and Sezan disclose all the limitations of Claim 19. Abecassis, Kwoh and Sezan are silent on the video stream being encoded based on detection of scene changes. Gove discloses that each video segment is defined by automatic detection of changes in scenery (Column 3, lines 13-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division

between the video segments is defined by automatic detection of changes in scenery (Column 3, lines 13-21) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA E. HOSSAIN whose telephone number is (571)272-5943. The examiner can normally be reached on Monday 7:30 am to 2:30 pm, Tuesday, Thursday and Friday 7:30 am to 4:30 pm and Wednesday 7:30 am to 12:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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FEH
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